# SONY.

# TRINITRON® COLOR TV

(CABLE COMPATIBLE TV)

# **OPERATING INSTRUCTIONS**

Welcome to the advanced world of Sony TV. For the best results and the utmost satisfaction from your new set, please read this manual thoroughly and retain it for future reference.

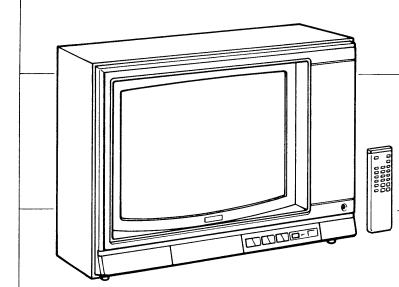
#### **OWNER'S RECORD**

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_Serial No. \_\_\_\_\_

## **CONTENTS**

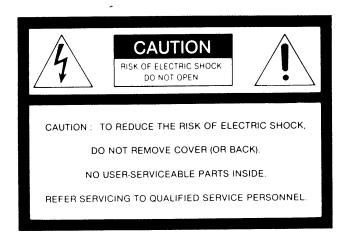
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## WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitude a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## **PRECAUTIONS**

#### Safety

- Operate the set only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further
- Unplug the set from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

#### Installation

- $\bullet$  To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the set in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

### Cleaning

Clean the set with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

#### Repacking

Retain the original carton and packing materials for safe transport of this set in the future.

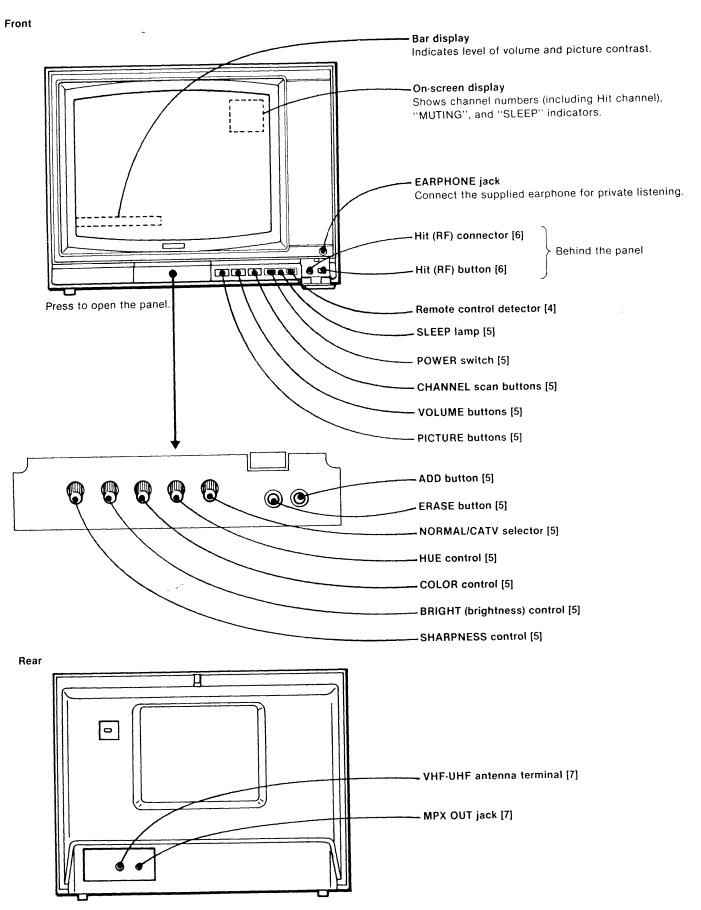
Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

# **FEATURES**

- New Black-tinted Trinitron picture tube absorbs most ambient light and remarkably improves picture contrast
- New Sharp Focus Electron Gun delivers clear and crisp images with remarkably improved sharpness all the way to the screen's edges and corners
- Remote control Trinitron color television
- Multi-band VHF/UHF/CATV tuning
- Sleep timer, which automatically turns the set off after one hour
- Front-mounted Hit (RF) connector, which allows easy connection to video games, microcomputers or portable video cassette recorders
- MPX (multiplex) OUT jack, which allows a special adaptor (optional) to be connected for any future multichannel TV sound (MTS) stereo or bilingual broadcasts
- On-screen display
- DYNAMIC COLORTM system for superior color reproduction with natural facial color tones and dazzling whites
   DYNAMIC PICTURE<sup>TM</sup> system, which adjusts picture contrast
- DYNAMIC PICTURE<sup>TM</sup> system, which adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene.
- ECONOQUICK<sup>TM</sup>, energy-saving, quick-start picture system

# **LOCATION OF CONTROLS**

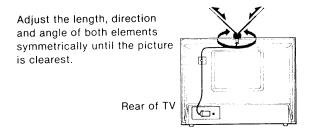
For details on the use of each control, refer to the pages indicated in brackets.



## **SET-UP**

### INDOOR ANTENNA ADJUSTMENT

For VHF/UHF reception, use the attached telescopic dipole anten-



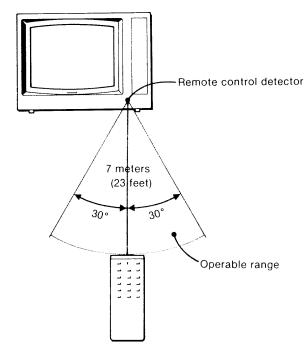
The indoor telescopic dipole antenna will provide good reception in

#### **REMOTE COMMANDER**

- 1 Turn the Remote Commander face down, press the tab and lift the cover.
- 2 Place batteries in the Commander with the polarities in the correct directions, as illustrated inside the case.
- 3 Replace the cover.

#### Notes

- Use 2 size AA batteries (IEC designation R6).
- In normal operation, batteries will last up to half a year. If the set does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.

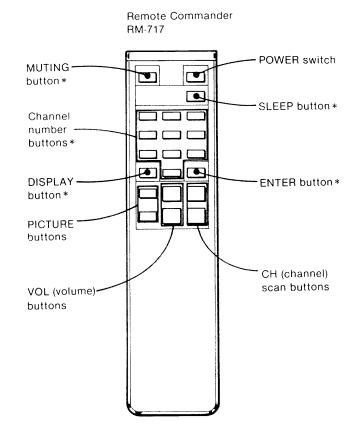


# **OPERATION**

#### VIEWING TV PROGRAMS

This TV set is capable of receiving normal VHF and UHF broadcasts plus cable TV channels (see "Cable TV channel chart"

Usually the Remote Commander is all that is needed to operate the TV in everyday use.



\*The functions of these buttons are not available on the TV.

#### Cable TV channel chart \* \*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

Numb	er on	this 7	ΓV			1	5	6	14	15	16	17
Corre	spond	ling C	ATV (	hann	el	A-8	A-7	A-6	Α	В	С	D
18	19	20	21	22	23	24	25	26	27	28	29	30
Ε	F	G	Н	1	J	К	L	М	N	0	Р	Q
31	32	33	34	35	36	37	38	39			93	94
R	S	Т	U	V	W	W+1	W+2	W+3			W+57	W+58
95	96	97	98	99	100	101	102			123	124	125
A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61			W+82	W+83	W+84

Check with your local cable TV company for more complete information on the available channels.

\*\*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.

#### -Preparation

Set NORMAL/CATV selector to: NORMAL for normal VHF and UHF programs. CATV for cable TV programs.

#### 1 Press POWER to turn on the TV.

The channel number will be displayed on the screen and the SLEEP lamp will light up for several seconds.

- 2 Select channels in one of the following two ways.
- Press the numeral(s) of the channel and then press ENTER.
   Ex. To select channel 6, press 6 and then ENTER.

To select channel 125, press 1, 2, 5 and then ENTER.

If you pressed a wrong numeral, wait for a few seconds and it

will disappear. Then try again.

• Press CH "+" for higher-numbered channels and "-" for

 Press CH "+" for higher-numbered channels and "-" for lower-numbered channels. Preset channels will appear in sequence. (For presetting desired channels, see "PRESETTING CHANNELS".

The channel display will remain on the screen for a few seconds. To keep the display on the screen, press DISPLAY.

**3** Adjust volume and picture to your preference, if necessary. Press VOL "+" to increase volume, or "-" to decrease it. Press PICTURE "+" to increase picture contrast, or "-" to decrease it.

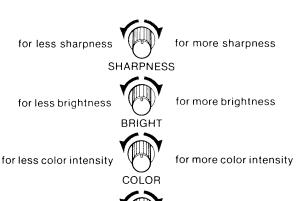
To mute the sound immediately, press MUTING. The "MUTING" display will appear on the screen. Press it again to restore the sound.

To turn off the set, press POWER again.

To have the set turn off automatically after one hour, press SLEEP. The "SLEEP" display will appear on the screen a few seconds and the SLEEP lamp on the TV will remain lit for one hour.

#### PICTURE ADJUSTMENTS

Satisfactory results will usually be obtained with the controls set at the normal center or center detent position. If any adjustments are necessary, turn the controls as follows.

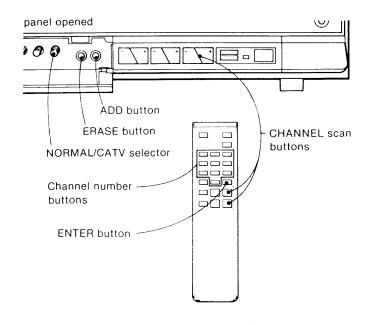


skin tones become purplish



skin tones become greenish

# PRESETTING CHANNELS



Receivable channels of your set are:

VHF: 2-13 UHF: 14-69 CATV: 1-125

By adding and erasing channels, you can preset your TV so that only the desired channels appear in sequence when CHANNEL +/- is pressed

#### **PREPARATION**

- 1. Turn on TV.
- 2. Set the NORMAL/CATV selector to the proper mode.

For VHF and UHF channels: NORMAL For cable TV channels: CATV

#### **ADDING CHANNELS**

- 1 Select the channel to be added by pressing the channel number buttons and then ENTER.
- 2. Press ADD.

A "+" indication will appear on the left of the channel display on the screen, indicating that the channel has been included in the proper numerical sequence when you press CHANNEL +/-. Repeat steps 1 and 2 for other channels to be added.

# ERASING CHANNELS

- 1. Select the channel to be erased.
- 2. Press ERASE.

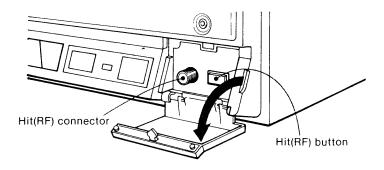
A "-" indication will appear on the left of the channel display on the screen, indicating that the channel has been erased. When CHANNEL +/- is pressed, you will see that the channel is skipped over in the numerical sequence.

Repeat steps  ${\bf 1}$  and  ${\bf 2}$  for other channels to be erased. To add erased channels again, follow the steps in "ADDING CHANNELS".

#### Note

You cannot erase a VHF or UHF channel from the memory and retain the cable TV channel which has the same number, or vice versa. If either a VHF/UHF channel or a cable TV channel with the same number is to be kept in the memory, do not erase the number.

# HIT (RF) CONNECTOR USAGE



#### -What is the Hit (RF) connector?

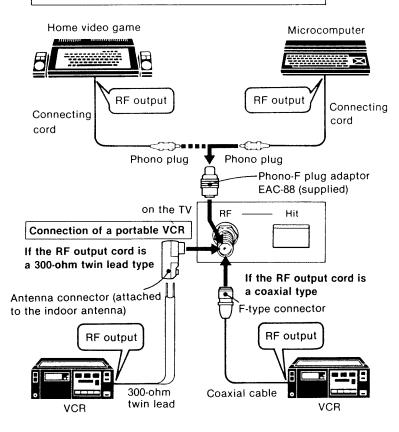
"Hit" is an abbreviation of Home Interface Terminal. Hit (RF) connector is an auxiliary RF input (F-type) which may be used for easy connection of a home video game, a portable VCR or a microcomputer. To view the picture generated by the connected equipment, simply press the Hit (RF) button. You can enjoy the TV set as a display terminal for the connected equipment.

#### -Caution -

Unplug the TV and other equipment from the wall outlet before making the connections.

#### CONNECTION

#### Connection of a home video game or a microcomputer



#### Connection of a stationary VCR

Connect the VCR to the antenna terminal of the TV and connect the outdoor antenna only to the VCR.

#### Notes

- $\bullet$  Keep the VCR away from the TV, if the display or sound is affected.
- If the microcomputer has been placed on or too close to the TV set, noise will appear on the screen. Keep the microcomputer an appropriate distance away so that the picture appears clear.
- The connection of a microcomputer sometimes causes distorted and noisy pictures. In this case, readjust the controls located in the front panel. When you go back to watching a TV program, readjust the controls again.
- The picture quality obtained by connection to the Hit (RF) connector on the front of the TV and to the antenna terminal on the back is almost the same.
- While watching the TV, when the RF output of equipment connected to the Hit (RF) connector is too close to TV broadcasting frequencies, interference will occur. In this case, readjust the output frequency of the equipment.

#### TO SET THE HIT CHANNEL

The Hit (RF) connector is available for equipment that can deliver an RF signal between VHF channels 2 through 6.

The first time the Hit (RF) button is pressed, VHF channel 3 is memorized to be selected.

If the output channel of the equipment to be connected is not channel 3, add its own output channel following the instructions in "ADDING CHANNELS" on page 5.

# TO DISPLAY PICTURES FROM THE CONNECTED EQUIPMENT

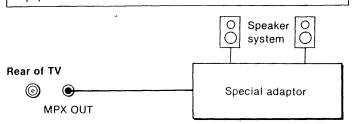
- 1. Press Hit (RF) button.
- "Hit" and channel indication will appear on the screen.
- 2. Select the Hit channel adjusted to match the output of the connected equipment.

To go back to TV programs, press Hit (RF) again.

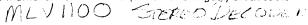
# MPX OUT JACK USAGE

#### -Caution

Before connecting, make sure that the power to each piece of equipment is turned off.



Connect to the MPX OUT jack an optional special adaptor for any future multichannel TV sound (stereo or bilingual) broadcasts.



# OUTDOOR ANTENNA/CABLE CONNECTION

If you cannot obtain satisfactory reception with the dipole antenna, using an outdoor antenna may be necessary.

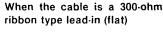
Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

- 1 Remove the indoor antenna from the antenna terminal of the TV.
- 2 Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See A or B below.)

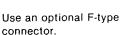
# A Combination VHF/UHF antenna,\* VHF antenna, UHF antenna or CATV cable

Select the proper connector according to the cable type.

When the cable is a 75-ohm coaxial type (round)

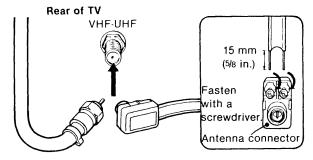








Attach the antenna connector which was fixed to the indoor antenna.

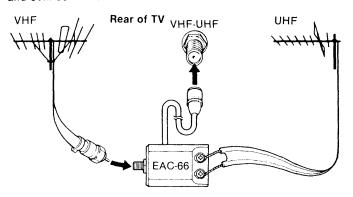


\*Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

#### B When both VHF and UHF antennas are connected

Prepare the VHF antenna end using the appropriate connector as illustrated in A.

Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.



#### Note

When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over  $37 \ (W+1)$ .

#### Note to CATV system installer in the U.S.A:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

# **SPECIFICATIONS**

Television system

American TV standards

Channel coverage

VHF: 2-13 UHF: 14-69 Cable TV: 1-125

Picture tube

Output

Trinitron tube

19-inch picture measured diagonally

20-inch picture tube measured diagonally Auxiliary RF input for VHF channels 2-6

Hit (RF) connector 75-ohm (F-type)

MPX output (phono jack) 77.5 mVrms Load impedance 10 kilohms (main channel, 1 kHz, 100% modulation)

120 V AC, 60 Hz

Power requirements Power consumption

120 W (max.)

6 W (in standby condition)

Accessories supplied Remote Commander RM-717 with 2 size

AA batteries

Earphone

Phono-F plug adaptor EAC-88

Design and specifications subject to change without notice.

# TROUBLESHOOTING

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

SYMPTOM	CHECK AND ADJUST				
Poor or no picture (screen not lit), good sound	<ul> <li>Adjust PICTURE.</li> <li>Adjust BRIGHT.</li> <li>Re-orient antenna. Check antenna/cable connections.</li> </ul>				
Good picture, no sound	Press VOLUME +. Disconnect the earphone. Release MUTING on the Remote Commander.				
No picture (screen not lit), no sound	Is POWER switched on? Power in outlet?				
No color	Is it a color program?				
Snow and noise only	Is it an active or the correct channel?     Check the NORMAL/CAT's selector setting.     Check the Hit (RF) buttor setting.     Check antenna connections.				
Dotted lines or stripes	This is often caused by loca interference. (ex. cars, neor signs, hair-dryers etc.) Adjus antenna for minimum interference.				
Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.				

If the problem still cannot be solved, contact your nearest service facility.